

## COPD topic review

- Start with spirometry to make the diagnosis:  $FEV1/FVC < 70\%$  means you have COPD.
- Then you compare FEV1 numbers to a people of the same age, sex, and race, to get % of predicted (of note, CCRMC uses latino, AA, and white – no asian, persian, etc) which tells you how to start treatment.
- Treat to improve quality of life, decrease exacerbations and hospitalizations, etc. Realize that nothing except quitting smoking and using oxygen has an effect on mortality.

Mild COPD:  $FEV1 > 80\%$  of predicted

- use short acting prn (or on a schedule, if that makes the person feel better)– like albuterol or atrovent

Moderate COPD:  $FEV1 = 50-80\%$  of predicted

- add a long acting bronchodilator: preferably Titotropium/*Spiriva* (anti-cholinergic) which seems to work the best (you might have to fill out a PAR and say they have moderate COPD and have failed Albuterol or something, they are pretty good about approving it after that)
- alternatively, guidelines say you can use a long acting beta-agonist like Salmeterol/*Serevent* or Formoterol/*Perforomist*
- consider pulmonary rehab if they have good insurance.
- Only if there symptoms aren't controlled on the above regimen (long acting bronchodilator + short acting prn) do you add ICS.

Severe COPD:  $FEV1 = 30-50\%$  of predicted

- here is where you add the inhaled corticosteroid (careful cause there's some data that says it increases the risk of pneumonia!). Examples are: Fluticasone/*Flovent*, Beclomethasone/*QVAR*, Budesonide/*Pulmicort*, Mometasone/*Asmanex*, Triamcinolone/*Azmacort*.
- For time saving reasons and increased compliance, you can use a combo med like Fluticasone + Salmeterol = *Advair* or Bedesonide + Formoterol = *Symbicort*
- consider oxygen if they meet criteria. Some people would recommend getting an echo and an EKG at this stage to see if COPD is causing right heart strain – in that case, there is a lower threshold for oxygen. Remember that oxygen decreases mortality!

Very Severe COPD:  $FEV1 < 30\%$  of predicted

- same as severe COPD.

And always remember:

\* Quit smoking! \* think about depression, social isolation, malnourishment, muscle wasting, and the other comorbid conditions that come with COPD.\* realize that people will keep limiting their activities as they get worse. Don't just ask about symptoms, ask about how much they do.

- Erin Helgersen, September 2012 - with special thanks to Dr Diaz!

Good resources: the American Thoracic Society COPD guidelines, the GOLD (Global initiative for chronic Obstructive Lung Disease) website.